Preliminary Investigation of Snapping Turtles

The Hudson River Trustee Agencies— assessing and restoring your natural resources

Past and continuing discharges of polychlorinated biphenyls (PCBs) have contaminated Hudson River natural resources. While the USEPA is continuing with cleanup plans, federal and state trustee agencies are conducting a natural resource damage assessment (NRDA) to assess and restore natural resources injured by PCBs.

This factsheet provides information about a preliminary investigation of PCB impacts to reptiles being implemented under the NRDA.

The Hudson River and its surrounding habitat support many species of reptiles. These animals spend a large part of their lives in contact with potentially contaminated substances—water, sediment, and soil—and consume potentially contaminated prey.

Trustee agencies act on behalf of the public to restore natural resources injured by hazardous substances. To learn more, please contact—

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> www.darp.noaa.gov/neregion/ hudsonr.htm

www.dec.state.ny.us/website/hudson/index.html

http://contaminants.fws.gov/restorationplans/HudsonRiver.cfm

Snapping turtles (Chelydra serpentina serpentina), a particular reptile species, are an important part of the Hudson River food web. Snapping turtles consume vegetation and a wide variety of animal matter including insects, crustaceans, clams, earthworms, fish, frogs, snakes, small turtles, birds, and small mammals. Young snapping turtles and turtle eggs are also prey for skunks, snakes, birds, and other wildlife.

PCB Exposure and Effects

Many laboratory and field studies done in other parts of the country have shown the potentially harmful effects of PCBs on fish, birds, mammals, and other wildlife. However, toxicological data on PCB impacts on reptiles are limited. Some past turtle studies indicate that PCBs may cause behavioral abnormalities, biochemical alterations, and reduced hatching of eggs.

Purpose

Trustees are investigating the extent to which snapping turtles in the Hudson are exposed to PCB contamination.

Trustees collected eggs from snapping turtles in June 2002 and are now analyzing these eggs for contamination.

These data will inform the trustees about the need for future reptile studies.

Five eggs per nest were collected. Turtles generally produce large clutches of eggs yearly (averaging 15-50 eggs per clutch). Females may lay more than one clutch per year. When the trustees collected the eggs, care was taken to minimize disturbance to the turtles and their nests.



How can you help?

The trustees would like to hear your ideas for possible restoration projects in the Hudson River valley. Please tell us about habitats (wetlands, streams, etc.), resources (fish, birds, or other wildlife), or specific sites that could be restored or enhanced. Contact one of the individuals in the blue box if you have restoration ideas or for more information.

Investigators

The study is being implemented by the trustee agencies—

- The U.S. Department of Interior.
- New York State Department of Environmental Conservation, and
- National Oceanic and Atmospheric Administration.





